PROCEDURES FOR THE VERIFICATION OF CRITICAL DIMENSIONS OF WASHING VESSELS AASHTO T 210

A. PURPOSE

This method provides instruction for the verification of critical dimensions of washing vessels, lids, and gaskets used in durability test. The speed (cycles per minute) of the modified Tyler shaker is also verified.

B. APPARATUS REQUIRED

1. Calipers capable of measuring the inside diameter of the vessels and lids readable to 0.001 inch.
2. Calibrated tachometer.
3. Ruler capable of measuring the height of the vessel.

C. PROCEDURE

1. Measure and record the inside diameter of the vessels to the nearest 0.001 inch. Rotate vessel 90 degrees (1/4 turn) and measure and record the inside diameter again.
2. Repeat Step 1.
3. Measure the inside and outside diameter of the lid and record.
4. Measure and record the height of the vessel to the nearest 0.001 inch. Rotate vessel 90 degrees (1/4 turn) and measure and record the height again. (Measure from the inside bottom of the vessel to the top of the rim.)
5. To verify the speed (cycles per minute) of the modified Tyler Shaker, place a piece of reflective tape on the base of the vessel holder. Place the vessel with water and sample inside and lid attached and locked in the vessel holder. Secure the vessel to the vessel holder. Position tachometer so the light hits the tape. Start shaker and allow to run for five (5) minutes. Observe and record RPM. Obtain the RPMs two more times and record. Obtain the average of the three tests and record as the RPMs of the shaker.

D. TOLERANCE

Critical dimensions shall meet the requirements specified in AASHTO Method T 210. The equipment is considered to be out of tolerance if any of the measurements do not meet specifications.

Note: All footnotes in the test method apply.

EQUIPMENT VERIFICATION RECORD

Verified By: _____ Date: _____

Equipment: Durability Equipment Location (Lab): _____

Identification No.: _____ Verification Frequency: 12 months

Previous Verification Date: _____ Next Due Date: _____

Verification Equipment Used: Calibrated tachometer, SN: _____ ; Calipers (readable to 0.001 in.), SN: _____ ; Ruler

Verification Procedure: (In-house) OMR-CVP-49 / AASHTO T 210

Washing Vessel ID	Inside Diameter 7,875-7.938	Inside Height 9.5-9.9563	Remarks
Vessel Lid	Inside Diameter	Outside Diameter	
Lid Width	7.858-7.891	8.594-8.656	
Vessel Gasket	7.828-7.859	8.5-8.531	

Condition of washing vessel: Good _____ Fair _____ Poor _____

Rim Smooth? Yes _____ No _____

Rim plane to 0.01 in.? Yes _____ No _____

Vessel water tight? Yes _____ No _____

Does the vessel have three clamps in operating condition? Yes _____ No _____

Is vessel made of 20-gauge stainless steel? Yes _____ No _____

Modified Tyler Shaker: Serial No. or QC No. _____

RPMs first test _____

RPMs second test _____

RPMS third test _____

Shaker speed or cycles per minute (range 275-295)? Average _____

Shaker condition: Good _____ Fair _____ Poor _____

Remarks: